



## SEQUENCE LISTING



<110> Engelhardt, John F.  
Duan, Dongshen  
University of Iowa Research Foundation

<120> Adeno-associated virus vectors

<130> 875.007US2

<140> US10/054,665

<141> 2002-01-22

<150> US 60/086,166

<151> 1998-05-20

<150> US 09/276,625

<151> 1999-03-25

<160> 14

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 20

<212> DNA

<213> Adeno-associated virus

<400> 1

cggggggtcgt tgggcggtca

20

<210> 2

<211> 19

<212> DNA

<213> Adeno-associated virus

<400> 2

gggcggagcc tatggaaaa

19

<210> 3

<211> 505

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic consensus sequence

<400> 3

cggggggtcgt	tgggcggtca	gccaggcggg	ccatttaccg	taagttatgt	aacgactgca	60
ggcatgcaag	ctcgaattca	tcggtagata	agtagcatgg	cggggttaatc	attaactaca	120
aggaaccctt	agtgatggag	ttggccaactc	cctctctgcg	cgctcgctcg	ctcgctgagg	180
ccgggcgacc	aaaggctcgcc	cgacgcccgg	gctttgcccc	ggcggcctca	gtgagcgagc	240
gagcgcgag	ctgcgcgctc	gctcgctcac	tgaggccgcc	cgggcaaagc	ccgggcgtcg	300
ggcgaccttt	ggtcgccccg	cctcagcgag	cgagcgagcg	cgagagagg	gagtggccaa	360
ctccatcact	aggggttcct	tgtagttaat	gattaaccgc	ccatgctact	tatctacagc	420
ttgcatgcat	gtgagcaaaa	ggccagcaaa	aggccaggaa	ccgtaaaaaa	gccgcgttgc	480
tggcggtttt	ccataggctc	cgccc				505

<210> 4  
 <211> 272  
 <212> DNA  
 <213> AAV circular intermediate, clone p81

<400> 4  
 gcatgcaagc tgtagataag tagcatggcg ggттаатсат таactacaag gaaccсctag 60  
 tgatggagtt ggccactccc tctctgcgcg ctсgctсgct cactgaggcc gggcgгccaa 120  
 aggtcgcccg acgcccgggc ttтgcccggg cggcctcagt gagcgagcga gcgcgcagag 180  
 agggagtggc caactccatc actaggggtt ccttgtagtt aatgattaac ccgccatgct 240  
 acttatctac cgatgaattc gagcttgcat gc 272

<210> 5  
 <211> 300  
 <212> DNA  
 <213> AAV circular intermediate, clone p79

<400> 5  
 gcatgcaagc tgtagataag tagcatggcg ggттаатсат таactacaag gaaccсctag 60  
 tgatggagtt ggccactccc tctctgcgcg ctсgctсgct cactgaggcc gggcgгcgсg 120  
 tcgctcgctc actgaggccg ggcgacaaa ggtcgcccga gcccgggctt tgcccgggсg 180  
 gcctcagtga gcgagcgсgс gcgcagagag ggagtggcca actccatcac taggggttcс 240  
 ttgtagttaa tgattaaccс gccatgctac ttatctaccg atgaattсga gcttgcatgc 300

<210> 6  
 <211> 272  
 <212> DNA  
 <213> AAV circular intermediate, clone p1202

<400> 6  
 gcatgcaagc tgtagataag tagcatggcg ggттаатсат таactacaag gaaccсctag 60  
 tgatggagtt ggccactccc tctctgcgcg ctсgctсgct cactgaggcc gggcgгaccaa 120  
 aggtcgcccg acgcccgggc ttтggtcgcc cggcctcagt gagcgagcga gcgcgcagag 180  
 agggagtggc caactccatc actaggggtt ccttgtagtt aatgattaac ccgccatgct 240  
 acttatctac cgatgaattc gagcttgcat gc 272

<210> 7  
 <211> 165  
 <212> DNA  
 <213> Unknown

<220>  
 <223> SEQ ID NO:1 of U.S. Patent No. 5,478,745

<400> 7  
 aggaaccсct agtgatggag ttggccactc cctctctgcg cгctсgctсg ctсactgagg 60  
 ccgggcgacc aaaggtcgcc cgacgcccgg gctttgcccг ggсggcctca gtgagcgagc 120  
 gagcgсgсag agaggggagtг gccaactcca tcactagggg ttcct 165

<210> 8  
 <211> 282  
 <212> DNA  
 <213> rAAV circular intermediate, clone p79

<400> 8  
 ggcggggсcat ttaccgтаag ttatgtggcg actgcaggca tgcaagctcg aattcatcgг 60  
 tagataagta gcatggcggg tтаатсаттг cctacaaaga gcccctagtг atggagtggг 120  
 ccactccctc tcttcgссga gcgcgcagag agggagtggc caactccctc actaggggtt 180  
 cctggcagtt aatgattaac ccgccatgct acttatctac агcttgcatг catgtgagca 240  
 aaaggccagc aaaaggccag gaaccгтааа aaggccгсgt тг 282

<210> 9  
 <211> 345  
 <212> DNA  
 <213> rAAV circular intermediate, clone p80

<400> 9  
 ggccattttac cgtaagttat gtaacgactg caggcatgca agctcgaatt catcggtaga 60  
 taagtagcat ggcgggttaa tcattaacta caaggaaccc ctagtgatgg agttggccac 120  
 tccctctctg cgcgctcgct cgctcgctca ggccgggcca ccaaaggctc cccgacgccc 180  
 gcccgggcctc agcgagcgag cgagcgcgca gagagggagt ggccaactcc atcactaggg 240  
 gttccttgta gttaatgatt aaccgccc gctacttacc tacagcttgc atgcatgtga 300  
 gcaaaaggcc agcaaaaggc caggaaccgt aaaaaggccg cgttg 345

<210> 10  
 <211> 276  
 <212> DNA  
 <213> rAAV circular intermediate, clone p81

<400> 10  
 ggccattttac cgtaagttat gtggcgactg caggcatgca agctcgaatt catcggtaga 60  
 taagtagcat ggcgggttaa tcattgccta caaagagccc ctagtgatgg agcccgccct 120  
 caccgagcga gcgagcgcg cagaggggag tggccaactc catcactagg ggctccttgg 180  
 agttaatgat taaccgcca tgctacttat ctacagcttg catgcatgtg agcaaaaggc 240  
 cagcaaaagg ccaggaaccg taaaaaggcc gcgttg 276

<210> 11  
 <211> 316  
 <212> DNA  
 <213> rAAV circular intermediate, clone p86

<400> 11  
 ggccattttac cgtaagttat gtaacgactg caggcatgca agctcgaatt catcggtaga 60  
 taagtagcat ggcgggttaa tcattaacta caaggaaccc ctagtgatgg agttggccac 120  
 tccctctctg cgcgctcgct cgctcgctga ggccgccccg gcctcagcga gcgagcgagc 180  
 gcgagagag ggactggcca actccatcac taggggttcc ttgtagttaa tgattaacct 240  
 gccatgctac ttatctacag cttgcatgca tgtgagcaaa aggccagcaa aaggccagga 300  
 accgtaaaaa ggccgc 316

<210> 12  
 <211> 208  
 <212> DNA  
 <213> rAAV circular intermediate, clone p87

<400> 12  
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 taagtagcat ggcgggttac tcattgccta caaagagccc ctagtgatgg aattggaatg 120  
 attcaccctc catgctactt atctacagct tgcattgcatg tgagcaaaaag gccagcaaaa 180  
 ggccaggaac cgtaaaaagg ccgcgttg 208

<210> 13  
 <211> 310  
 <212> DNA  
 <213> rAAV circular intermediate, clone p88

<400> 13  
 gccattttacc gtaagttatg taacgactgc aggcattgca gctcgaattc atcggtagat 60  
 aagtagcatg ggcgggttaac cattgcctac aaagagcccc tagtgatgga gttggccact 120  
 cctctctctg cgcgctcgctc gctgggcccc gcctcagcga gcgagcgagc gcgagagag 180  
 ggagtggcca actccatcac taggggttcc ttgtagttaa tgattaacct gccatgctac 240  
 ttatctacag cttgcatgca tgtgagcaaa aggccagcaa aaggccagga accgtaaaaa 300  
 ggccgcgttg 310

<210> '14  
 <211> 334  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> A synthetic portion of the consensus sequence

<400> 14

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gccactccct	ctctgcgcgc	tcgctcgtc	gctgaggccg	ggcgaccaa	ggtcgcccga	120
cgcccgggct	ttgccgggc	ggcctcagt	agcgagcgag	cgcgagctg	cgcgctcgt	180
cgctcactga	ggccgcccgg	gcaaagccc	ggcgtcgggc	gacctttgg	cgcccgccct	240
cagcgagcga	gcgagcgcg	agagagggg	tggccaact	catcactag	ggttccttgt	300
agttaatgat	taaccgcga	tgctacttat	ctac			334